# Brian Huang

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**OBJECTIVE**

Seeking a Senior Software Engineer position to leverage my expertise in Java and  web technologies.

**QUALIFICATIONS**

○ Accomplished Senior Software Engineer with deep expertise in architecting and developing complex enterprise applications for the banking sector. Expertise in leveraging **Java/J2EE** and modern web technologies to drive innovation and deliver high-quality solutions.

○ Strong background in building dynamic front-end user interfaces for large-scale financial applications, utilizing technologies such as **React.js, Redux, Node.js, Express, TypeScript, ES6**, and advanced **CSS-in-JS** frameworks to create engaging user experiences.

○ Demonstrated expertise in integrating UI with **REST** and **GraphQL** APIs, backed by a solid foundation in testing tools like **Jest, Cypress, Playwright**, and **Storybook** to ensure application robustness and performance.

○ Innovative in designing and implementing microservices and RESTful services, with a strong emphasis on scalability, maintainability, and comprehensive API documentation using Swagger and GraphQL.

○ Specialized in delivering impactful solutions for high-volume data streaming, processing, storage, searching, and reporting, leveraging **Core Java/J2EE** in conjunction with **Spring Boot, Spring AOP, Spring Data, Spring Cloud, Kafka, Spark, MQ, JUnit, Mockito and Kubernetes**.

○ Expertise in architecting and managing data solutions with technologies such as **Elasticsearch, HBase, Cassandra, MySQL, and Oracle,** ensuring high performance and reliability.

○ Extensive experience in employing cutting-edge development methodologies, including Object-Oriented Programming (**OOP**), Service-Oriented Architecture (**SOA**), Test-Driven Development (**TDD**), Domain-Driven Design (**DDD**), Java Design Patterns, Agile methodologies, and the Software Development Life Cycle (**SDLC**).

○ Skilled in managing all aspects of IT projects, including requirements gathering, creative design and architecture, **agile** development, and effective project management. Experienced in coordinating offshore teams to coordinate efforts and ensure project success.

**EXPERIENCE**
2014 - Present

**Senior Software Engineer, Vice President**
Digital Post Trade, **JP Morgan Chase**

○ Designed and implemented **JPMorgan's Market Post Trade Optimize,** the firm's first web-based application for trade confirmations and settlements, featuring robust functionalities for **valuations**, **confirmations, settlements, and cash flow netting** processes across multiple business lines, including **Foreign Exchange, Fixed Income, Derivatives, Equities, and Commodities**.

○ Created the core render engine for Optimize as a dynamic, **configuration-driven** platform using **React and Redux**, facilitating the seamless onboarding of various business lines onto the Post Trade Optimize platform with minimal configuration updates, thus ensuring rapid market entry.

○ Collaborated with UX designers to develop a clean and modern application that is user-friendly, information-rich, and intuitive. The design prioritizes ADA compliance and includes A/B testing capabilities, built upon the **JPMM UI Toolkit, AgGrid, and Highcharts**.

○ Developed the first-generation JP Morgan Market Post Trade Dashboard for trade settlements utilizing **Backbone, jQuery, and Bootstrap** to enhance the user experience in data visualization.

○ Engineered a post-trade data processing layer using **Kafka, Hadoop, Spark, HBase, and Solr,** deployed to an **Apache Storm** cluster, optimizing data handling and monitoring for increased efficiency.

○ Modernized the post-trade data processing architecture harnessing **Spring Boot, Kafka, Oracle, and Elastic Search**, deployed on JPMorgan Chase's Gaia **cloud infrastructure and Kubernetes**. Designed a resilient system capable of processing millions of trade data entries during peak hours while maintaining reliable, recoverable, and traceable operations.

○ Developed a real-time Confirmation and Settlement PDF generation process using Java with **Apache POI, Jasper Reports**, and Freemarker templates. This system also enables the generation of Excel and Word reports, allowing users to transition away from paper-based confirmations and settlements.

- Designed and implemented various components for the JP Morgan Unity System, a case management platform that facilitates investigation and resolution of trade data discrepancies and service inquiries.
- Created a dynamic **ReactJs** form builder for the Unity system, enabling varied HTML inputs based on business line requirements within a low-code platform. Leveraging a **JSON schema form builder,** users can drag-and-drop components to create sophisticated input forms, effectively replacing numerous legacy Flush-based input forms.
- Implemented dynamic rule computation and input validation utilizing **React** and open-source UI technologies, empowering power users to quickly prototype forms and integrate them efficiently with backend data sources.
- Implemented ingestion of Payment Fraud data using **Apache Camel, Avro, and Kafka, ElasticSearch**, **Cassandra**, integrating with various payment data lakes to source client and related data, enabling users to detect fraudulent transactions.
- Developed search functionalities for the Unity data source using a **ReactJs** frontend to build complex queries for accessing both Unity's internal **Elastic Search** datastore and external partner data lakes, designed as a micro-frontend architecture to support diverse business lines.

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| 2001 – 2014 | **Senior Developer, Vice President** |

Investment Research Technology, **Goldman Sachs**

- Developed the Goldman Sachs Research Publishing Platform, ensuring the firm's compliance control environment. Led all aspects of the application life cycle, including collaboration with stakeholders, design, development, and testing. Managed sprints, daily scrums, and mentored junior developers.
- Designed and developed a next-generation research clearance system based on **J2EE** architecture, streamlining the research review process.
- Created web applications for managing publishing processes utilizing **XML, XSLT, Velocity, jQuery, Apache Struts, Lucene, and Tomcat, with Apache Axis** for web services integration.
- Developed a **Java workflow engine** that serves as the core component of the Goldman Sachs research clearance application. Managed version control (CVS/SVN), continuous integration builds, and production deployments, migrating to the open-source **Camunda engine** for enhanced workflow management.
- Designed and deployed a **QlikView**-based Business Intelligence (BI) dashboard and scorecard system to monitor and manage analyst performance effectively.
- Developed a charting component for generating price charts embedded in research publications, utilizing a custom **SVG** charting library implemented with **jQuery and D3.js** for enhanced data visualization.
- Contributed to the development of Quantum, Goldman Sachs' research analytics platform, responsible for capturing, storing, and distributing company financial data for equity analysts. Developed ETL processes using S**hell, Perl, C#, and Java** to batch process server logs, telephony call logs, third-party data feeds, and various **DB2 and Sybase** data sources.
- Managed market data feeds and corporate action processes, collaborating with market data vendors to develop reliable data feeds and resolve data-related issues. The system was developed utilizing P**erl, Sybase, TIBCO RV, and JBoss EJB/JMX**.
- Participated in the development of the Goldman Sachs Portal Framework for building web portals to service institutional clients. The framework was developed using **Struts, custom JSP tag l**ibraries, and **Apache Xerces/Xalan**, and deployed on **WebLogic** clusters for high availability and scalability.
- Developed GS Alert, a **Java Mail-**based content distribution system for disseminating research publications and event notifications to clients.

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| **EDUCATION** | MS, University of Mississippi |
| | BS, Hua Qiao University, China |